IN THE CLAIMS:

1. (canceled) ~~A method of controlling a plurality of transcoding channels, a transcoding channel allowing an input compressed data signal encoded at an input bit rate to be converted into an output compressed data signal encoded at an output bit rate wherein a regulation process uses quantization scales and the input compressed data signal to obtain the output bit rate, said method of controlling comprising :~~

~~a step of computing an indicator of a compressed data quality for the respective transcoding channels, said indicator being computed from the input compressed data signal independent of the regulation process, and~~

~~a step of allocating the output bit rate to the transcoding channel from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoding channels~~.

2. (currently amended) ~~A method of controlling a set of transcoding channels as claimed in claim 1~~A method of controlling a plurality of transcoding channels, a transcoding channel allowing an input compressed data signal encoded at an input bit rate to be converted into an output compressed data signal encoded at an output bit rate wherein a regulation process uses quantization scales and the input compressed data signal to obtain the output bit rate, said method of controlling comprising:

a step of computing an indicator of a compressed data quality for the respective transcoding channels, said indicator being computed from the input compressed data signal independent of the regulation process, and

a step of allocating the output bit rate to the transcoding channel from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoding channels, wherein the indicator is computed from an average, over a set of encoded pictures, of a function of an average quantization scale over a picture and a number of bits used to encode the same picture.

3. (original) A method of controlling a set of transcoding channels as claimed in claim 2, wherein the indicator is computed from a weighted average of a set of the averages calculated over the set of encoded pictures.

4. (currently amended) A controller for controlling a set of transcoders, a transcoder allowing an input compressed data signal encoded at an input bit rate to be converted into an output compressed data signal encoded at an output bit rate wherein a regulation process uses quantization scales and the input compressed data signal to obtain the output bit rate, said controller comprising :

a processor configured to determine an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal independent of the regulation process, and

allocate the output bit rate to the transcoder from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoders, wherein the indicator is computed from an average, over a set of encoded pictures, of a function of an average quantization scale over a picture and a number of bits used to encode the same picture.

5. (currently amended) A data multiplexing system comprising :

a set of transcoders for converting input compressed data signals encoded at an input bit rate into output compressed data signals encoded at an output bit rate, wherein a regulation process uses quantization scales and the input compressed data signal to obtain the output bit rate,

a controller for controlling the set of transcoders and comprising :

means for computing an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal independent of the regulation process,

means for allocating the output bit rate to the transcoder from a total output bit rate, its corresponding indicator and a sum of the indicators of the transcoders, and

a multiplexer for providing a multiplexed data signal at the total output bit rate by multiplexing of the output compressed data signals, wherein the indicator is computed from an average, over a set of encoded pictures, of a function of an average quantization scale over a picture and a number of bits used to encode the same picture.

6. (currently amended) A computer program product for a controller that comprises a set of instructions, which, when loaded into the controller, causes the controller to carry out the method of controlling as claimed in claims ~~1~~2 to 3.